Release A CDR RID Report

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Review

Originator Ref
Priority 2

Section PF Page 12 Figure Table

Category Name External Interfaces

Actionee ECS

Sub Category

Subject Security

Description of Problem or Suggestion:

Prevent unauthorized IP traffic onto ECS processors. For example, How would you prevent Internet originated datagrams from being forwarded locally in ethernet broadcast/multicast address frames?

Also: it can happen the other way, which may cause some form of disclosure.

Originator's Recommendation

The ECS Security Architecture did not address the potential of a security incident relating to message routing controls to prevent unauthorized IP traffic onto ECS processors.

GSFC Response by:

GSFC Response Date

HAIS Response by: D. Moore

HAIS Schedule 9/13/95

HAIS R. E. D. Moore

HAIS Response Date 10/20/95

ECS will prevent unauthorized traffic onto ECS processors and networks via the use of IP and TCP layer filters in the FDDI switch/router. The details of the network security plan are outlined in section 5.2.5 of the "Overview of R-A SDPS/CSMS System Design."

To answer the example given, the FDDI switch will operate on the IP (network) layer and will route packets based on IP address. Ethernet or FDDI broadcasts/multicasts are MAC-layer entities and therefore would not be forwarded by the FDDI switch. Thus, there is no way for broadcast/multicast traffic to be either forwarded into or out of the ECS DAACs.

Status Closed

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Sponsor Herring

Attachment if any *****

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